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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/582,544

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EXAMINER

CHAKOUR, ISSAM

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/582,544	Applicant(s) MATSUHASHI, KEIICHI	
	Examiner ISSAM CHAKOUR	Art Unit 4163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06/09/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06/09/2006; 09/21/2006</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 9 is rejected under 35 U.S.C. 101 because it discloses "A computer program" which is currently held to be non-statutory subject matter.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Chavez (US 5,550,896).

5. Regarding claim 1, Chavez discloses a roaming system comprising: one or more controllers (e.g. switching node, see Column 3, lines 15-16) provided for each of zones that constitute a wireless network; and a server (e.g. the mobility management application and network management systems, see Column 4, lines 21 and 31 respectively) communicatively connected to the controllers in the zones, wherein each of the controllers comprises storage means that stores (see Column 3, lines 27) identification information or authentication information (see Column 3, lines 24) given to wireless terminals for receiving a service, the wireless terminals being registered with the zone in which the controller resides, and each controller operates to detect the identification information on a wireless terminal from the storage means when a request for the service is received from the wireless terminal, and to provide the service to the wireless terminal if the identification information is detected or to issue a query or request for checking outside (from switching node 110 to mobility management application or network management system depending on the hierarchy) for the presence of the identification information (an integral part of the TSP, see column 4, line 19-20) if the identification information is not detected (see Column 4, lines 52-59); and the server is adapted to maintain information indicating which controller in which zone stores the identification information on the wireless terminals, and the server operates to, on receiving the query, detect a controller that stores the identification information on the wireless terminal for which the identification information is not detected, to

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communicate with the detected controller to confirm the presence of the identification information (See column 4, lines 61-65) on the wireless terminal which identification information is not detected, and to allow the controller that has issued the query to provide the service to the confirmed wireless terminal (see Column 4, lines 24-31 and lines 45-65).

6. In claim 2, Chavez discloses the roaming system according to claim 1, wherein the server is integrated with one of the controllers (see Column 4, lines 16-17).

7. Regarding claim 3, Chavez teaches the roaming system as indicated above according to claim 1 and 2 respectively. Chavez does not teach explicitly the server such that it operates to prohibit provision of the service to the confirmed wireless terminal if the query is received from a controller in a particular zone. However, in a roaming system, there is an interface function responsible for authenticating and deciding the provision or prohibition of service because when the user moves to a site outside his/her assigned controller there must be a decision interface that tests for authentication of the user and decides the provision or prohibition of the service depending on the contract or the user profile, else the service will not be provided outside the region of coverage of the assigned controllers.

8. Regarding claim 4, Chavez discloses a mobile communication system that allows access to a single directory information tree (e.g. network management systems, see

Column 4, line 30 and item 115 in figure 1) from a plurality of directory servers (e.g. the mobility management application) corresponding to a plurality of sites in a mobile communication network, and comprises a plurality of authentication controllers (e.g. switching nodes, see Column 3, lines 14) provided in the respective sites for authenticating mobile communication terminals that request a service at each site, and wherein each of the plurality of authentication controllers comprises:

search request generation means that acquires identification information on a mobile communication terminal and generates a search request directed to the directory server when a request for a service is received from the mobile communication terminal;

search request transmission means that transmits the search request generated by the search request generation means to the directory server in the corresponding sites; and authentication processing means that determines whether or not to permit provision of

the service to the mobile communication terminal based on a search result acquired from the directory server (see Column 3, lines 6-26. Even though the feature of permission or denial of service based on search results is not explicitly mentioned, it is inherent in roaming systems as it allows the service provider to selectively provide the service based on their profile and initial selection of plans), and wherein each of the

plurality of servers comprises: storage means that stores identification information given to mobile communication terminals for receiving a service, the mobile communication terminals being registered with the site corresponding to the directory server;

identification information detection means that detects, from the storage means, the identification information on a mobile communication terminal specified in the search

request from the authentication controller or in the search request redirected from a directory server corresponding to another site; search request redirection means that redirects the search request from the authentication controller to a directory server located above or below (see Column 16, lines 6-13) in the directory information tree among the directory servers corresponding to other sites when the identification information on the mobile communication terminal is not detected by the identification information detection means; and search result provision means that provides a search result indicating success in detection of the identification information to the authentication controller when the identification information on the mobile communication terminal is detected in the other directory server to which the search request has been redirected by the search request redirection means, or in the identification information detection means, and wherein the authentication processing means operates to determine to permit provision of the service to the mobile communication terminal when the search result indicating success in detection of the identification information on the mobile communication terminal is acquired from the directory server (see Column 3, lines 23-42 and claim 7).

9. Regarding claim 5, Chavez further teaches the mobile communication system according to claim 4, wherein: each directory server comprises reference information storage means that stores address information on another directory server located above or below in the directory information tree (See claim 7, Column 22, line 9-19); and the search request redirection means operates to refer to the address information

stored in the reference information storage means and to redirect the search request to the other directory server located above or below in the directory information tree (See claim 7, Column 21, line 53-59). Note that the communication and request messages for authentication between switching nodes entail that each switching nodes has addresses of others above or below in the hierarchy by which the communication is possible, thus this feature is inherent).

10. Regarding claims 6, 8, and 9 Chavez teaches a mobile communication system that allows access to a single directory information tree having a hierarchical tree structure from a plurality of server apparatus, wherein of the plurality of server apparatuses comprises:

entry management means that stores entries in a directory provided in a subtree in the directory information tree, an attribute value of each entry being identification information given to any one of the mobile communication terminals which are able to provide a service in a mobile communication network (See column 4, lines 62-65 and column 9, lines 16-39);

Identification information detection means that detects the identification information on a mobile communication terminal among the attribute values of the entries stored in the directory by the entry management means (column 15, lines 59-61);

Search request transmission means that transmits a predetermined search request to another server apparatus located above or below in the directory information tree when the identification information or the authentication information on the mobile

communication terminal is not detected by the identification information detection means (See column 15, line 36 and lines 59-61);

and service provision control means that allows provision of the service to the mobile communication terminal when the identification information on the mobile communication terminal is detected in the other server apparatus to which the search request has been transmitted by the search request transmission means, or in the identification information detection means, and that prohibits provision of the service to the mobile communication terminal when no other server apparatus is located above or below in the directory information tree or when the identification information on the mobile communication terminal is not detected in the other server apparatus to which the search request has been transmitted by the search request transmission means (See column 15, line 27-29).

11. Regarding claim 7, Chavez teaches the mobile communication system according to claim 6, wherein: each server apparatus comprises reference information storage means that stores address information on another server apparatus located above or below in the directory information tree (See claim 7, Column 22, line 9-19); and the search request transmission means operates to refer to the address information stored in the reference information storage means and to transmit the search request to the other server apparatus located above or below in the directory information tree (See claim 7, Column 21, line 53-59).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Peglion (US 2003/0143996) teaches a roaming control method for authenticating terminals. Berkowitz et al (US 6,868,272) similarly teaches the roaming system such that the communication for authenticating users between network controllers is of hierarchical structure. Additionally Ericson et al (US 5,956,637) teach subscriber database management system for roaming system using hierarchical structure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ISSAM CHAKOUR whose telephone number is (571)270-5889. The examiner can normally be reached on Monday-Thursday(7:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Robinson can be reached on 5712722319. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

IC

/Mark A. Robinson/

Supervisory Patent Examiner, Art Unit 4163